Supplemental Figure Legends

Supplemental Figure 1. Body weight (A) and food intake (B) were measured weekly in mice fed low and high fat diets with or without sitagliptin supplementation. Data are from n=10 mice that were individually caged and fed for 12 weeks. Results are expressed as mean±SEM. A significant difference in body weight was measured started with week 4 in mice fed a high fat diet compared to all other groups. Food intake is not significantly different between different groups.

Supplemental Figure 2. Effect of sitagliptin on mRNA expression of pancreatic islet cytokines in mice treated with high fat or low fat diets with or without sitagliptin. Cytokines were measured by real-time PCR and results were expressed as fold change compared to high fat (A) or low fat (B) groups, respectively. Data are expressed as mean±SEM form n=5-7 mice/group.

Supplemental Figure 3. Effect of sitagliptin on mRNA expression of cytokines in adipocytes isolated from adipose tissue of high fat or low fat diet-fed mice with or without sitagliptin treatment. Cytokines were measured by real-time PCR and expressed as fold change compared to high fat (A) or low fat (B) groups, respectively. Data are expressed as mean±SEM form n=5-7 mice/group.

Supplemental Figure 4. Sitagliptin treatment has no effect on 12-lipoxygenase expression in mice fed a low fat diet. Immunohistochemistry was performed on paraffin-embedded adipose tissue sections from mice on low fat diet with or without sitagliptin treatment. Representative pictures (bottom) show sporadic immunopositive staining in

tissues from both groups. Semi-quantitative analysis (top panel) indicates no difference between groups. Results are expressed as mean±SEM from n=4 mice/group.

Supplemental Figure 5. Sitagliptin does not change macrophage infiltration in adipose tissue of mice on low fat diet. Immunostaining using MAC-2 antibody was performed in 4-5 mice/group and quantified as described in methods (A). Flow cytometry was performed on stromal vascular fraction obtained following collagenase digestion of epididymal adipose tissue from lean mice with or without sitagliptin treatment. (B). Macrophages were identified as double positive CD11b/F4/80 cells gated for CD45. Quantification was performed on samples from n=5 mice/group and expressed as relative percentage of cells normalized to adipose tissue weight.